

Owner's Manual



**SETTING UP INSTRUCTIONS
PARTS LIST**

McCORMICK

(Also McCormick-Deering)

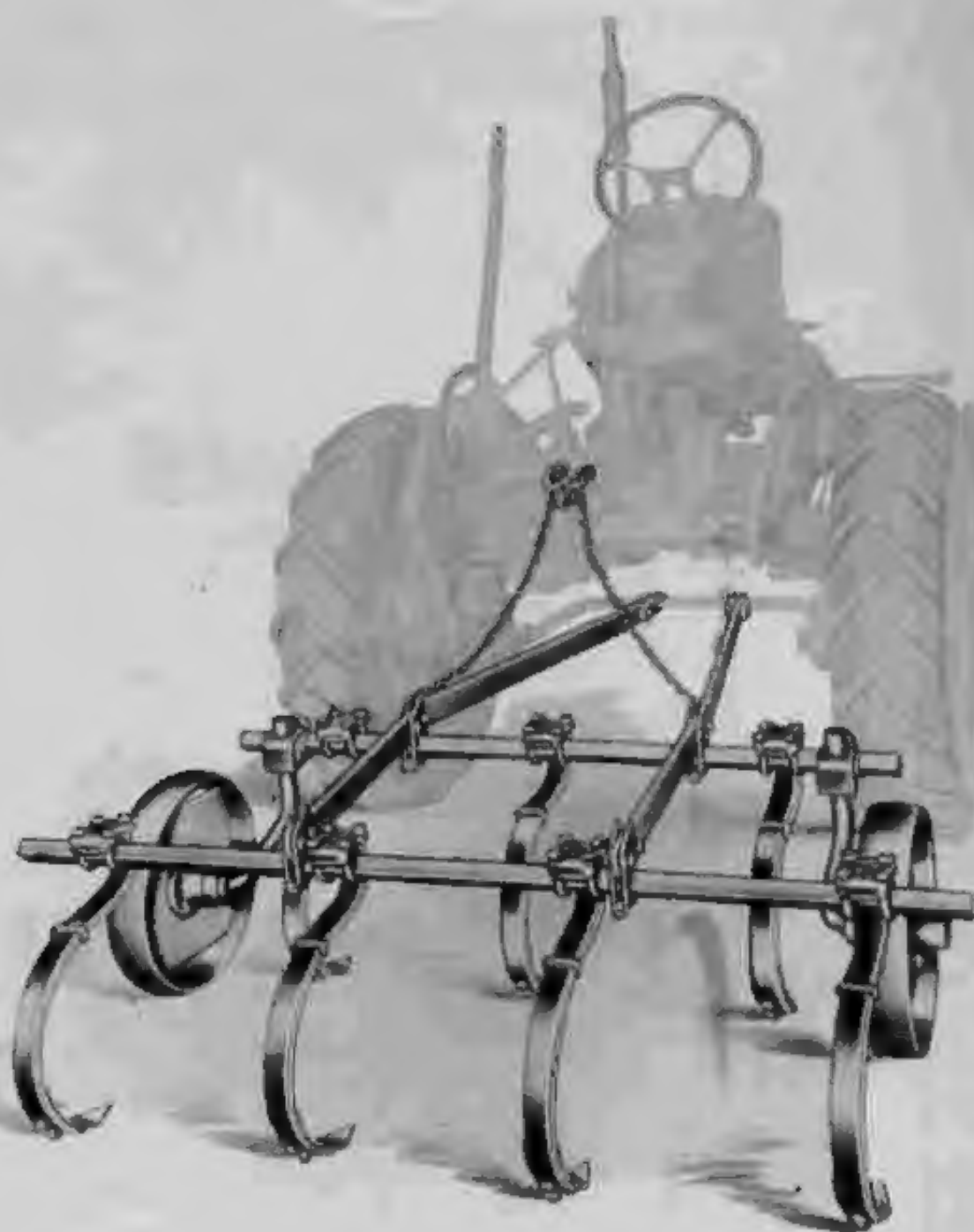
Cub-3

**Spring Tooth
Field Cultivator**

INTERNATIONAL HARVESTER COMPANY

180 North Michigan Ave.

Chicago 1, Illinois, U.S.A.



Case-3 Spring Tooth Field Cultivator.

TO THE OWNER

This cultivator consists of two frame rails, two 1-1/4" square tool bars, one long and one short, seven spring teeth with shovels and two steel tire gauge wheels. Pneumatic tire gauge wheels are available on special order.

The cultivator is pulled by means of the tractor drawbar which is extended forward. The frame rails are attached to the tractor drawbar to which the square tool bars are clamped parallel and behind the rear tractor wheels. The spring teeth are clamped on the tool bars. The gauge wheels control the operating depth.

This cultivator requires a master control lever (hand lift) which you may already have for use with some other implement. Because it is used with other implements, it is furnished only on special order.

You are urged to consult your International Harvester dealer concerning unusual field conditions or special crops. Within the International Harvester Company are men who have spent years in research and study of these things. Let the experience of these men serve you.

Be sure to read the instructions for Adjusting and Operating in this manual. Check each item referred to and acquaint yourself with the adjustments required to do a good job and to get maximum trouble-free service from your machine.

INSTRUCTIONS FOR ADJUSTING AND OPERATING

LUBRICATION

Keep all bearings and moving parts well lubricated.

GENERAL

It is recommended that the rear tractor wheels be equipped with either 7-24" or 8-24" pneumatic tires for maximum traction and ground clearance when the cultivator is in the raised position; however, 6-24" tires can be used.

This cultivator can be used with tractors equipped with fixed front axles; however, in view of the fact that various implements (not covered herein) are not adaptable to tractors with these axles, it is recommended the tractor be equipped with the adjustable type.

SPRING TOOTH SPACINGS

Spacings of 6, 7, 8 and 9" can be obtained between the spring tooth shovels. The frame rails can be adjusted along the tool bars, when necessary, to locate the spring tooth clamps.

MASTER CONTROL LEVER

CAUTION! Whenever the implement is removed from the tractor, the master control lever must always be set in the **FORWARD** notch in the quadrant. If another implement is not to be attached, the tension of the counter-balancing spring should be relieved.

INSTRUCTIONS FOR SETTING UP

Remove all wires and arrange parts conveniently.

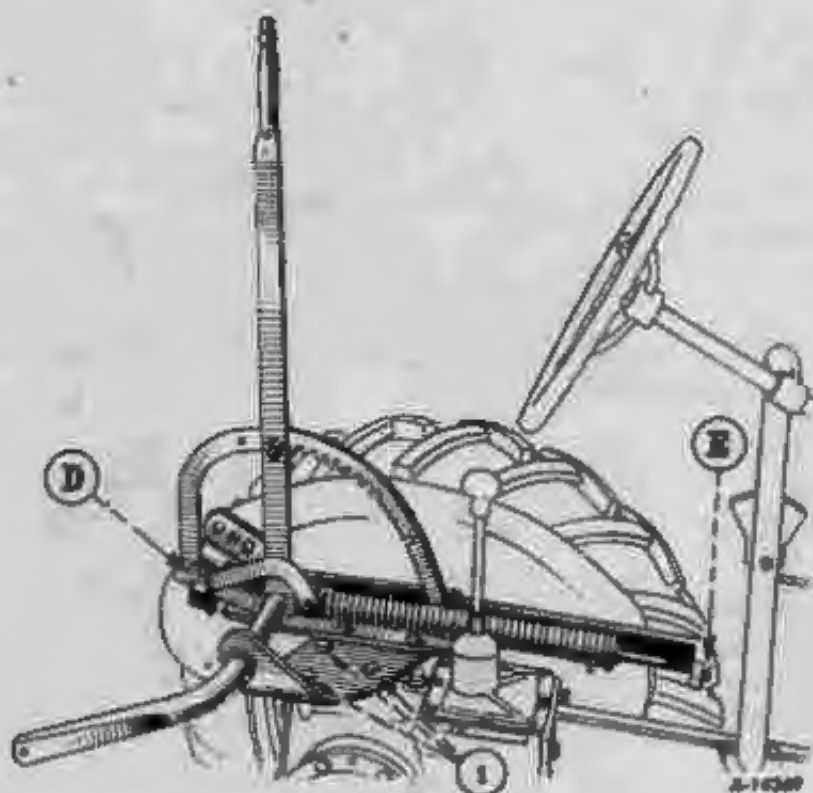
Lubricate all bearings and moving parts as you proceed and see that they work freely.

Bolts must be used in the holes in which they are found, or in parts to which they are attached, unless otherwise shown.

Shaded portions in the illustrations show parts to be assembled; these may be placed on the machine in the order numbered.

Wherever the terms "right" and "left" are used, it should be understood to mean from a position behind and facing the machine.

We reserve the right to make changes or improvements in the design or construction of any part without incurring the obligation to install such changes on any machine previously delivered.

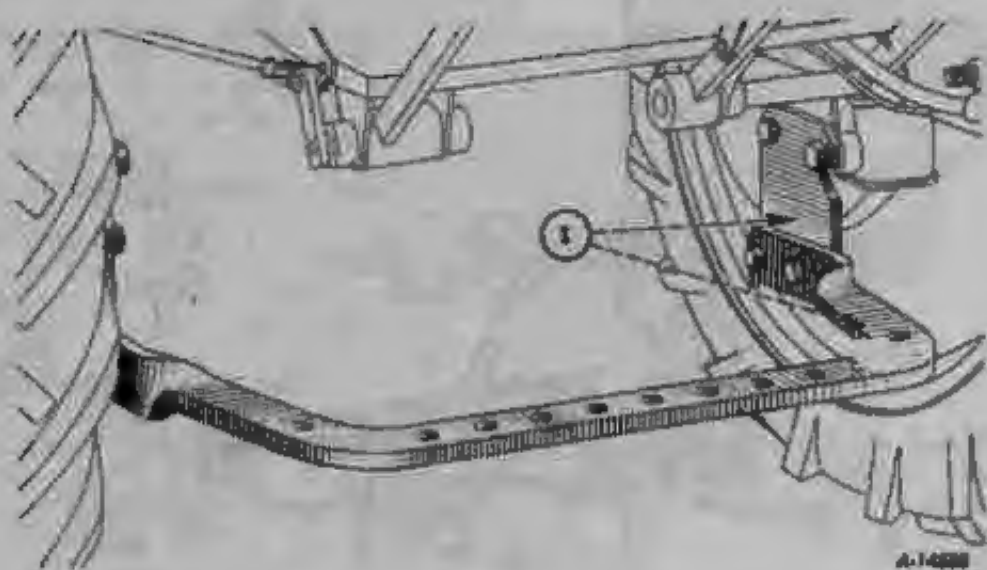
MASTER CONTROL LEVER (511 283 R93)

Illustr. 1

1. Bolt the lever unit to the transmission case with three cap screws.

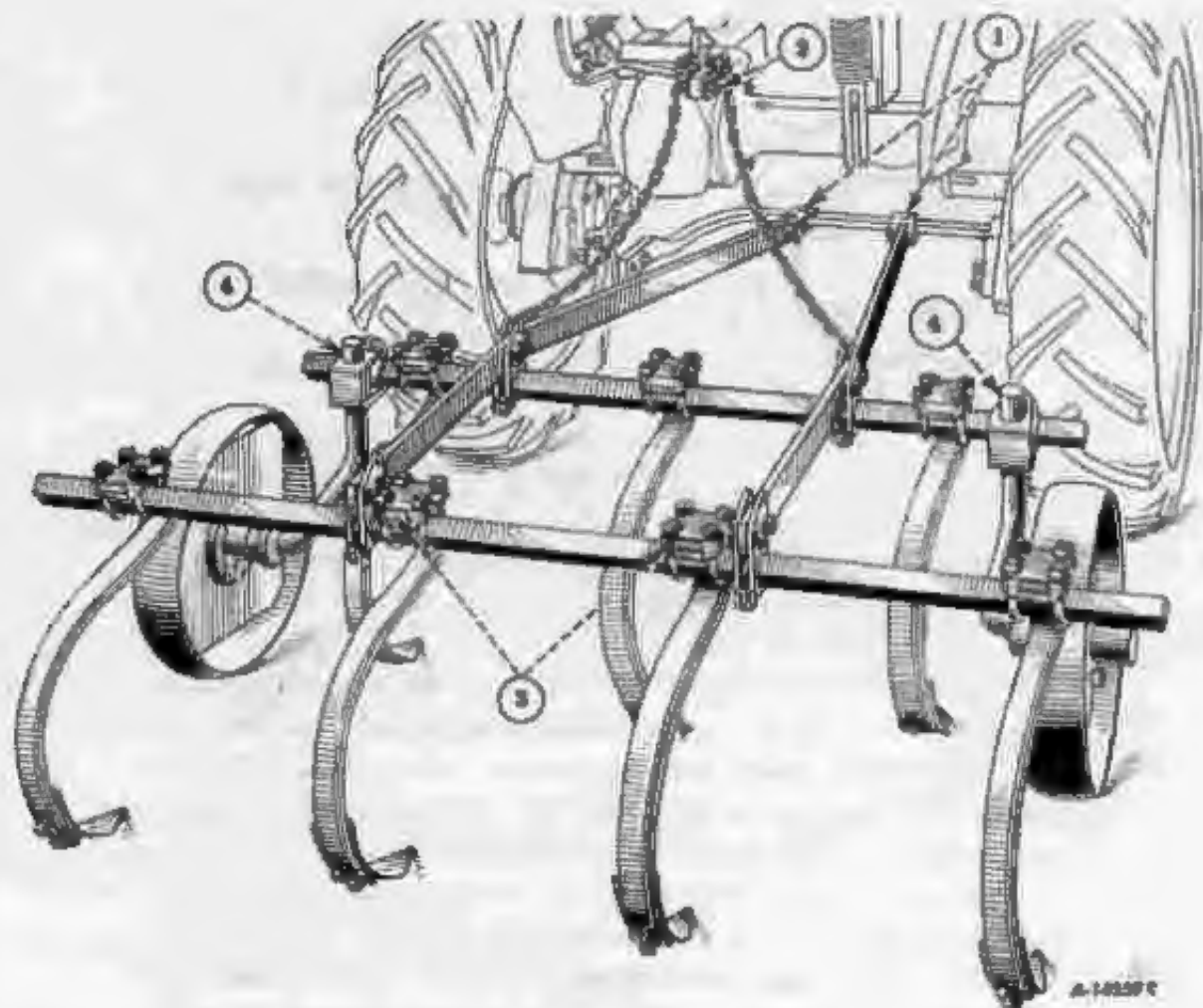
For greater ease in lifting the cultivator out of the ground, set the bolt "D" in the top of the slot in lift arm.

Balance the weight of the cultivator as desired by adjusting the spring tension at "E".



Illustr. 1

1. Remove the tractor drawbar from the rear of the tractor and attach it to the front pads on the tractor rear wheel housing as shown.



Illustr. 2

1. Place the cultivator frame under the tractor and attach it to the tractor drawbar with clevises and drilled pins. Secure the pins with quick-attachable cotters.

2. Connect the pickup chains with the chain clips to the rockshaft.

3. Lift the cultivator frame and set the spring teeth where desired.

4. Attach the gauge wheels as shown.

NOTE: Pneumatic tire gauge wheels are furnished only on special order. Steel tire gauge wheels are regular.



Farm Accidents can be prevented with your help

No accident-prevention program can be successful without the whole-hearted co-operation of the person who is directly responsible for the operation of equipment.

To read accident reports from all over the country is to be convinced that a large number of accidents can be prevented only by the operator anticipating the result before the accident is caused and doing something about it. No power-driven equipment, whether it be transportation or processing, whether it be on the highway, in the harvest field or in the industrial plant, can be safer than the man who is at the controls. If farm accidents are to be prevented—and they can be prevented—it will be done by the operators who accept a full measure of their responsibility.

It is true that the designer, the manufacturer, the safety engineer can help; and they will help, but their combined efforts can be wiped out by a single careless act of the operator.

It is said that *"the best kind of a safety device is a careful operator."* We ask you to be that kind of an operator.

PARTS LIST AND ILLUSTRATIONS

The following pages contain parts lists and "exploded" view illustrations of the various units disassembled so that parts wanted may be readily located. Reference numbers only are shown in the illustrations. To avoid errors and delays, when ordering parts always use the regular "Part Number" shown with the Ref. No. Do not use reference numbers when ordering parts.

WHEN THE PART NUMBER IS NOT KNOWN: Use the "Index to Units" below and refer to the illustration of the unit on which the part is used. The illustrations show reference numbers which appear in the accompanying reference list. The reference list contains the part number with a "noun first" or basic description.

WHEN THE PART NUMBER IS KNOWN: Use the numerical index at the back of the manual. This index shows the page number on which the part is listed. The reference number, which is listed with the part number, may be used for referring to the illustration.

Do not order from the illustrations only; refer to the list also.

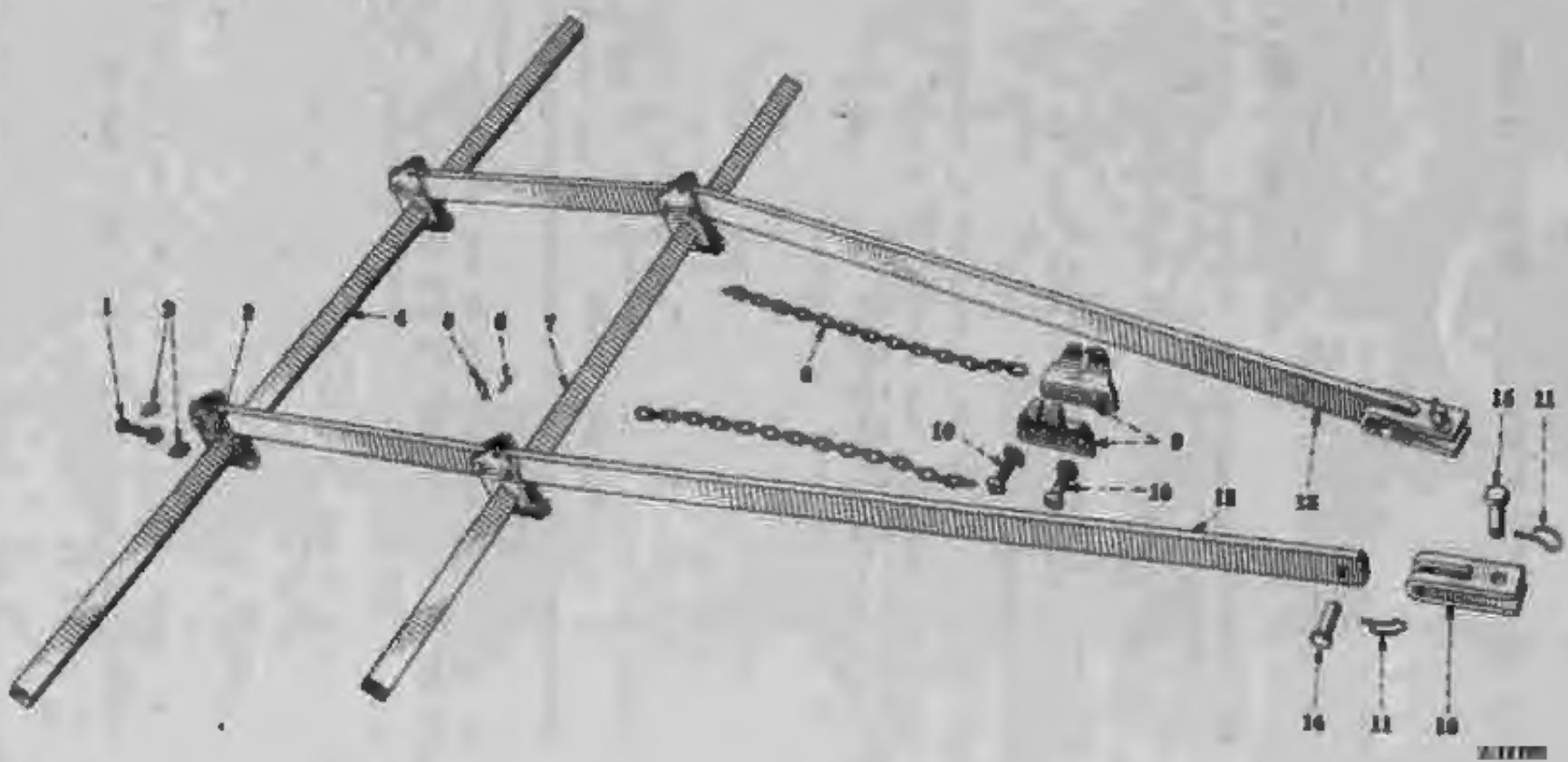
Attaching parts, such as bolts, cap screws, lock washers, nuts, cotter pins, etc. are listed beneath and indented from the part they attach. Attaching parts must be ordered separately as they are not furnished with the part they attach.

INDEX TO UNITS

Description	Page
Frame	10, 11
Gauge Wheels.	13
Master Control Lever (511 595 893).	14, 15
Spring Tooth.	12

Numerical Index to Part Numbers will be found on page 15.

List of abbreviations will be found on page 16.



Index to Reference Numbers shown in illustration on opposite page.

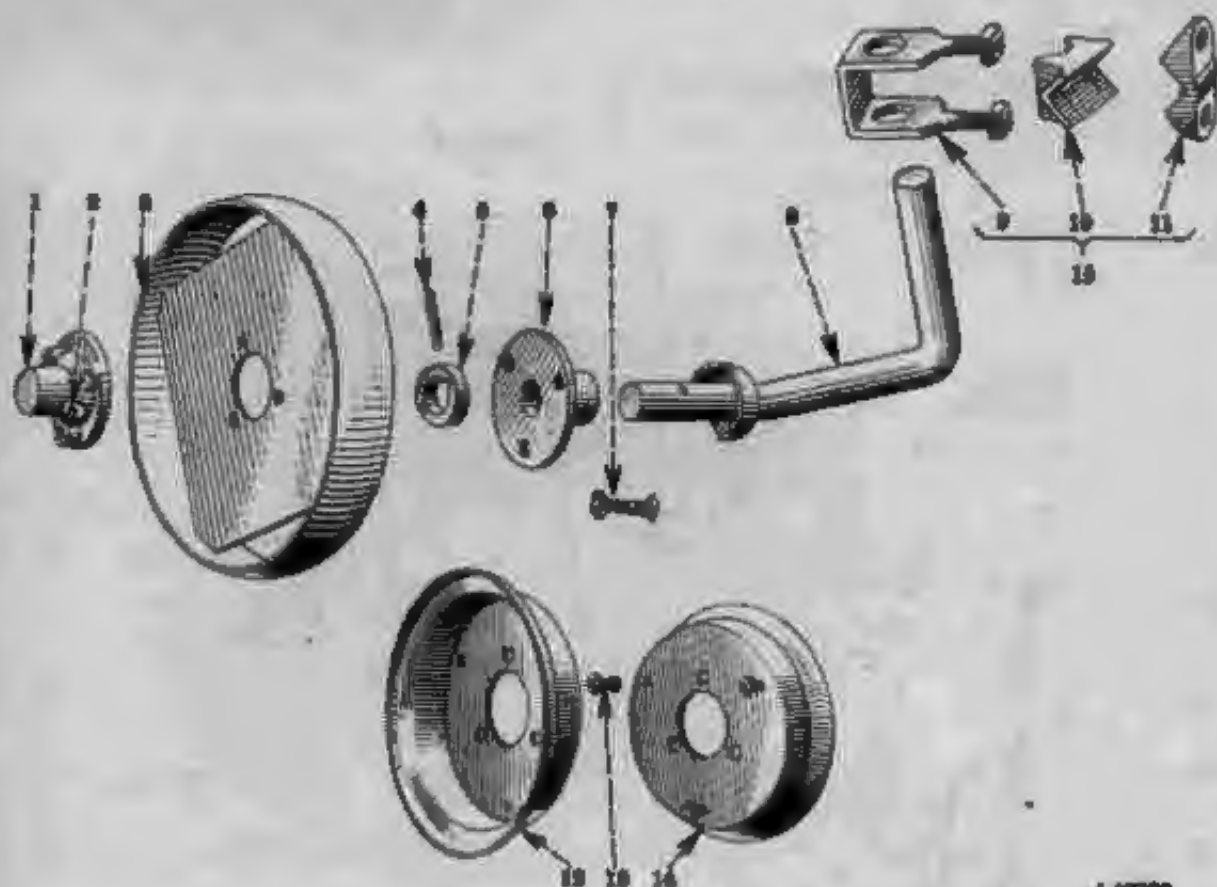
Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
1	13 415 R11	Follows Ref. No. 3.	9	513 968 R2	SHACKLE, lifting chain.
2	6 652	Follows Ref. No. 3.	10	13 538 R11	BOLT, machine, 1/2-13NC x 2", w/NUT (2 used).
3	511 934 R1	CLAMP, tool bar.	11	20 18 500 A	PIN, quick-attachable cotter.
	13 415 R11	BOLT, machine, 7/16-14NC x 3", w/NUT.	12	103 803	WASHER, lock, 1/2" (2 used).
	110 437	RIVET, std-hd., 7/16 x 1-1/2" (2 used).	13	511 938 R1	RAIL, frame, right.
	6 652	WASHER, plain, 15/32" I.D. x 1" O.D. x 16 ga. (2 used).	14	511 933 R1	RAIL, frame, left.
4	29 416 B	TOOLBAR (1-1/4" sq. x 60").	15	6 642	Follows Ref. No. 18.
5	1 179	Follows Ref. No. 8.	16	26 208 B	Follows Ref. No. 16.
6	13 068 R1	Follows Ref. No. 8.		511 935 R1	CLAVIS.
7	511 937 R1	TOOLBAR (1-1/4" sq. x 48").		20 18 500 A	PIN, quick-attachable cotter.
8	52 167	CHAIN, lifting (28 links of 1/4" Proof coil chain).		26 208 B	PIN, std-hd., 5/8 x 1-13/16".
	13 068 R1	PIN, cotter, 3/16 x 1 1/4".		6 642	PIN, std-hd., 5/8 x 2-1/4".
	1 179	PIN, std-hd., 5/16 x 1-1/4".		10 820 P	WASHER, plain, 21/32" I.D. x 1-1/2" O.D. x 16 ga.

SPRING TOOTH



Ref. No	Part Number	Description
1	PD 3 140	CAP, U-bolt.
2	PD 27 762 A	U-BOLT, spring tooth, w/NUTS.
	195 608	NUT, square, 1/2-13NC (2 used.)
	103 323	WASHER, lock, 1/2" (2 used).
3	PD 3 139	BLOCK, 8-amp.
4	P 16 280 1/2	SHOVEL.
	15 569 R11	BOLT, plow, No. 3, 7/16-14NC x 1-1/4", w/NUT.
	15 586 R11	BOLT, plow, No. 3, 7/16-14NC x 1-1/2", w/NUT.
	103 322	WASHER, lock, 7/16" (2 used).
	Q 109	WASHER, plain, 1/2" I.D. x 1-1/8" O.D. x 18 ga.
5	P 16 491	TOOTH, spring.
6	P 16 692	HELPER, tooth.
7	3 375	BUSHING, tooth helper.
8	P 16 705	TOOTH, spring, assembly (Consists of: 1 BUSHING 3 375 1 HELPER P 16 692 1 TOOTH P 16 691).

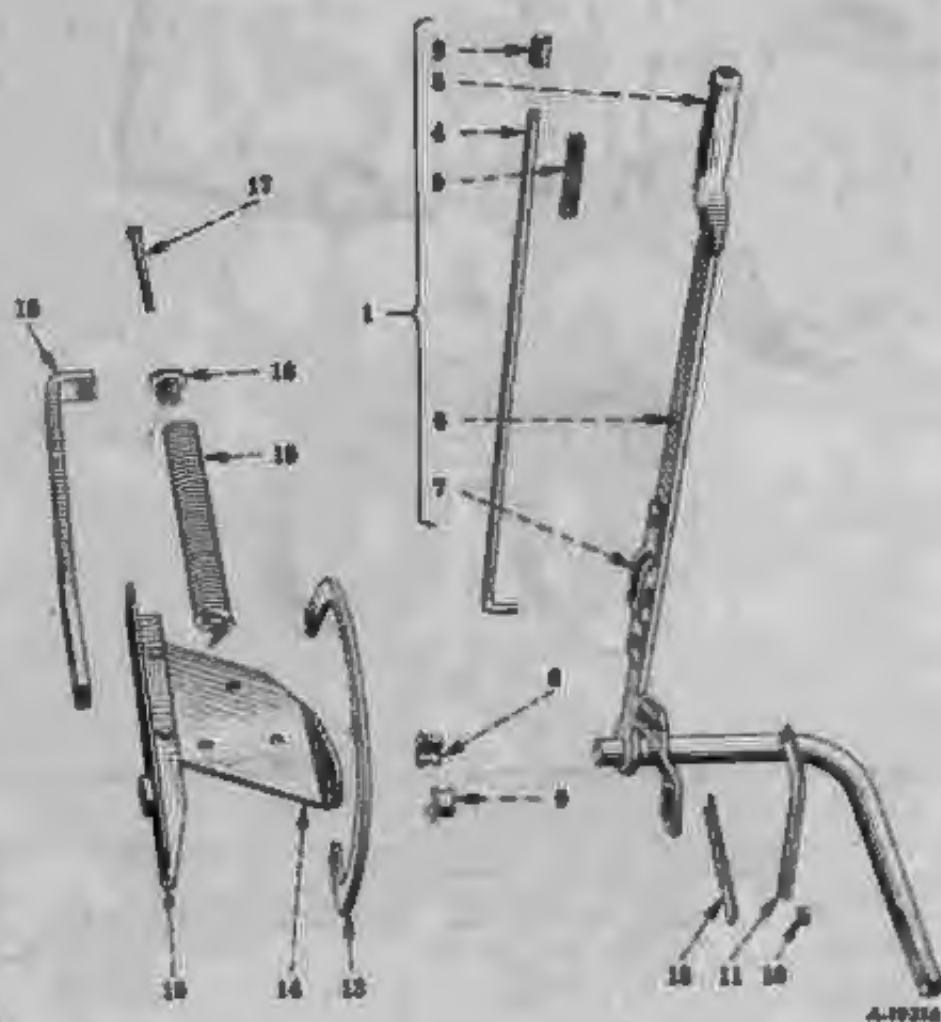
POGW-137 GAUGE WHEEL, Left (Steel Tire) (Regular)
 POGW-138 GAUGE WHEEL, Right (Steel Tire) (Regular)
 POGW-139 GAUGE WHEEL, Left (Pneumatic Tire) (Special)
 POGW-140 GAUGE WHEEL, Right (Pneumatic Tire) (Special)



A-17309

Ref. No	Part Number	Description
1.	PO 2 773	BOX, wheel, outside.
2	119 512	PITTING, lubrication, straight, 1/8".
3	PO 24 429	WHEEL, steel tire, (welded assembly).
4	PO 25 932	FOLLOWS Ref. No 5.
5	PO 2 953	COLLAR, thrust.
	PO 25 932	PIN, thrust collar.
6	PO 2 774	BOX, wheel, inside.
7	15 091 R11	BOLT, carriage, 1/2-15 NC x 2-1/4", w/NUT
	103 323	WASHER, lock, 1/2".
8	511 939 R11	AXLE, left, w/COLLAR (welded assembly).
	511 940 R11	AXLE, right, w/COLLAR (welded assembly).
9	512 937 R11	U-BOLT, axle, w/NUTS
	106 810	NUT, square, 5/8-11NC (2 used).
10	PO 3 190	BLOCK, U-bolt.
11	26 256 B	CAP, U-bolt.
12	B 32 992	WHEEL, disk, w/VALVE HOLE.
13	13 245 R11	BOLT, machine, 3/8-16NC x 3/4" w/NUT (2 used).
	103 321	WASHER, lock 3/8" (3 used).
14	B 38 968	WHEEL, disk, w/o VALVE HOLE.
15	814 769 R91	CLAMP, axle, assembly.

MASTER CONTROL LEVER (511 893 R93)



MASTER CONTROL LEVER (511 993 R93) - Continued

Index to Reference Numbers shown in illustration on opposite page.

Ref. No.	Part Number	Description
1	511 970 R93	LEVER and ROCKSHAFT, assembly.
2	511 984 R1	BUTTON, push, lever.
	142 485	PIN, groove, 1/8 x 5/8".
3	511 962 R1	HANDLE, lever.
	104 182	RIVET, ck-hd., 5/16" x 7/8".
	153 M	WASHER, plain, 7/16" I.D. x 11/16" O.D. x 18 ga.
4	511 963 R1	ROD, latching, lever.
	13 042 R1	PIN, cotter, 1/8 x 3/4".
	108 263	WASHER, plain, 7/16" I.D. x 1" O.D. x 14 ga.
5	2 087 A	SPRING, latch rod (41/64" O.D. x 3-3/8" long) (20 coils).
6	514 290 R92	ROCKSHAFT and LEVER (welded assembly).
	13 139 R1	PIN, cotter, 1/4 x 1-3/4".
	168	WASHER, plain, 1-5/16" I.D. x 2" O.D. x 18 ga.
7	514 297 R1	GUIDE, latching rod.
	104 099	RIVET, ck-hd., 5/16 x 1" (2 used).
8	1 691 B	BEARING, half, rockshaft, upper.
9	1 692 B	BEARING, half, rockshaft, lower.
10	27 485 B	BUSHING, spring link.
11	511 976 R1	LINK, spring.
	13 293 R11	BOLT, machine, 1/2-13NC x 1-1/2", w/NUT.
	PO 10 535	WASHER, plain, 17/32" I.D. x 1-1/4" O.D. x 11 ga. (2 used).
12	511 975 R1	ADJUSTER, spring link.
13	511 973 R2	QUADRANT, lever.
	13 271 R11	BOLT, machine, 7/16-14NC x 1-1/4", w/NUT.
	13 316 R11	BOLT, machine, 7/16-14NC x 1-3/4", w/NUT.
	103 322	WASHER, lock, 7/16" (2 used).
14	515 742 R1	PLATE, mounting, rockshaft.
	179 583	SCREW, cap, 1/2-13NC x 1-1/4" (3 used).
	103 322	WASHER, lock, 1/2" (2 used).
15	515 743 R1	SUPPORT, quadrant (also rockshaft support).
	114 774	NUT, hex., 1/2-13NC (4 used).
	15 025 R11	BOLT, carriage, 1/2-13NC x 1-1/4", w/NUT. (2 used).
16	511 974 R1	ANCHOR, spring, front.
	13 298 R11	BOLT, machine, 7/16-14NC x 1-1/2", w/NUT.
	103 322	WASHER, lock, 7/16".
17	511 974 R1	BOLT, machine, 1/2-13NC x 6" (w/5-1/8" of thread).
	PO 10 535	WASHER, plain, 17/32" I.D. x 1-1/4" O.D. x 11 ga.
18	M 1 425	PLUG, spring.
19	M 1 430	SPRING, balance (1-11/16" O.D. x 14-5/16" long (35 coils)).

NUMERICAL INDEX

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8 642	11	28 256 B	13	PO 2 933	13	15 041 R11	13
6 652	11	32 968	13	PO 3 139	12	15 989 R11	12
103 321	13	32 992	13	PO 3 140	12	15 988 R11	12
103 322	12			PO 3 190	13	511 932 R1	11
103 322	15	C		PO 10 535	15	511 933 R1	11
103 323	11			10 629 F	11	511 934 R1	11
103 323	12			PO 18 500 A	11	511 935 R1	11
103 323	13	C 155 M	15	PO 24 429	13	511 937 R1	11
103 323	15			PO 25 932	13	511 939 R11	13
104 089	15	F		PO 27 762	12	511 940 R11	13
104 182	25					511 962 R1	15
105 808	12	P 18 280	12	Q		511 963 R1	15
105 610	13	P 16 891	12			511 964 R1	15
106 263	15	P 16 892	12	Q 166	15	511 970 R93	15
114 774	15	P 16 705	12	Q 109	12	511 973 R2	15
119 512	13			Q 622	15	511 974 R1	15
142 485	15	M		Q 1 179	11	511 975 R1	15
179 663	15					511 976 R1	15
						512 857 R11	13
A		R1 430	15	R		513 988 R2	11
		M 1 425	15			514 297 R1	15
2 087 A	15			13 042 R1	15	514 298 R92	15
		N		13 068 R1	11	514 769 R91	13
B				13 139 R1	16	515 742 R1	15
		N 62 157	11	13 245 R11	13	515 743 R1	15
1 891 B	15			13 271 R11	15		12
1 682 B	15			13 292 R11	15	S 5 375	12
26 209 B	11	P		13 293 R11	15		
29 418 B	11	PO 2 773	13	13 316 R11	15	W	
				15 338 R11	11		
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ABBREVIATIONS USED IN THIS MANUAL

ga. gauge	sq. square
i.d. inside diameter	std.-hd. standard head
lgth. length	w/ with
NC. National Coarse Thread	w/o without
O.D. outside diameter	